



<b>CONTINUATION SHEET</b>	<b>Reference No. of Document Being Continued</b> <b>PIIN/SIIN</b> DAAE07-03-C-S089 <b>MOD/AMD</b> P00006	<b>Page</b> 2 <b>of</b> 12
<b>Name of Offeror or Contractor:</b> OSHKOSH TRUCK CORP.		

SECTION A - SUPPLEMENTAL INFORMATION

CONTRACT: DAAE07-03-C-S089  
 CONTRACTOR: Oshkosh Truck Corporation  
 MODIFICATION: P00006

PREVIOUS CONTRACT AMOUNT: \$12,665,914.44  
 AMOUNT OF THIS ACTION: \$11,304,665.14  
 CURRENT CONTRACT AMOUNT: \$23,970,579.58

1. The purpose of this modification is to incorporate additional effort into the contract as a result of Request for proposal (RFP) W56HZV-04-R-0746. The following changes/additions are hereby added and made apart of contract DAAE08-03-C-S089:

SECTION B

- a. CLIN 0006AA is established for HEMTT TECHICAL INSERTION at a estimated cost amount of \$8,373,866 and a fixed-fee amount of \$1,003,831 for a total estimated cost & fixed-fee of \$9,377,697.
- b. CLIN 0006AB is established for HEMTT A2 PLUS TECHNICAL INSERTION at a estimated cost amount of \$1,720,124.93 and a fixed-fee amount of \$206,843.21 for a total estimated cost & fixed-fee of \$1,926,968.14.

SECTION C

Add: Paragraphs C.5 through C.17.1.2 to the SOW.

SECTION F

Add: The Period of Performance for this effort is 365 days after award of contract modification.

SECTION G

Add: Clause 52.227-4004 RELEASE OF INFORMATION - OCT/2003

SECTION H

Add: Clause 252-225-7004 REPORT OF CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES - APR/2003  
 Clause 252-225-7013 DUTY-FREE ENTRY - JAN/2004

SECTION J

Add: Attachment 007 UPDATED PURCHASE DESCRIPTION FOR THE OFF-ROAD FAMILY OF VEHICLES & HEMTT Dated 06-Oct-2003  
 Attachment 008 CDRLs SMH-05 thru SMH-17 Dated 04 May-2004  
 Attachment 009 DIDS  
 Attachment 010 GOVERNMENT FURNISHED MATERIAL(GFM) GOVERNMENT FURNISHED PROPERT(GFP)LIST  
 Attachment 011 SUBCONTRACTING PLAN

Attachment 010 is physically attachment to this modification, and the other attachments are attachments as a separate PDF file.

2. As a result of this modification, the total dollar of the contract is increased by \$11,304,665.14 from \$12,665,914.44 to \$23,970,579.58. All other terms and conditions remains unchanged and in full force.

Name of Offeror or Contractor: OSHKOSH TRUCK CORP.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT						
	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS										
0006	SECURITY CLASS: Unclassified										
0006AA	<div>SERVICES LINE ITEM</div> <div>NOUN: HEMTT TECH INSERTION PRON: E14DC008J6    PRON AMD: 03    ACRN: AE AMS CD: 654622E4900  The Contractor shall perform this effort in accordance with Section C SOW paragraphs C.5 thru C.14  Estimated Cost:                \$8,373,866 Fixed Fee:                      \$1,003,831 Total Cost-Plus-Fixed-Fee \$9,377,697  (End of narrative B001)  <u>Inspection and Acceptance</u> INSPECTION: Origin            ACCEPTANCE: Origin  <u>Deliveries or Performance</u> DLVR SCH                                PERF COMPL <table><tr><td><u>REL CD</u></td><td><u>QUANTITY</u></td><td><u>DATE</u></td></tr><tr><td>001</td><td>0</td><td>30-JUN-2005</td></tr></table> \$        9,377,697.00</div>	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	0	30-JUN-2005				\$ 9,377,697.00
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>									
001	0	30-JUN-2005									

Name of Offeror or Contractor: OSHKOSH TRUCK CORP.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006AB	<div>SERVICES LINE ITEM</div> <div>NOUN: HEMTT A2+ TECH INSERTION PRON: E14DC009J6      PRON AMD: 02      ACRN: AE AMS CD: 654622E4900  The Contractor shall perform this effort in accordance with Section C SOW paragraphs C.15 thru C.17.1.2  Estimated Cost:                      \$1,720,124.93 Fixed Fee:                              \$    206,843.21 Total Cost-Plus-Fixed-Fee    \$1,926,968.14    </div>				

<b>CONTINUATION SHEET</b>	<b>Reference No. of Document Being Continued</b>  <b>PIIN/SIIN</b> DAAE07-03-C-S089 <b>MOD/AMD</b> P00006	<b>Page</b> 5 <b>of</b> 12
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**Name of Offeror or Contractor:** OSHKOSH TRUCK CORP.

#### SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

##### C.5. Design Cleanup Following Prototype Vehicle Build

C.5.1. Following the fabrication and build of the initial prototype vehicles which are defined as the Phase 0 truck built under the base contract and the first Pre-Production Truck (PPT #1 IAW para.C.7 below), the contractor shall perform the necessary design activity to change and correct component and piece-part design drawings and associated support documentation to accurately reflect the PPT #1 configuration. This shall include the creation and completion of installation and quality assurance documentation based on the configuration identified during the build sequence.

C.5.1.1. In addition to the design activity in paragraph C.5.1., the contractor shall provide to the Government a copy of the production bill of materials (BOM) (CDRL SMH-05). The BOM development is an iterative process and may require one or more intermediate BOM structures maintained in various formats such as Microsoft EXCEL or other similar data management software.

C.6. The contractor shall install one load handling system (LHS) on the Phase 0 truck prior to contractor-directed shakedown testing. The installation effort shall include modifications to the Phase 0 truck to account for interface issues arising from initial performance and shakedown testing on the vehicle. The contractor shall perform functional/Quality Control (QC) testing of the installed LHS to confirm safe operation of all required motions. The contractor shall provide a LHS functional/QC test summary (CDRL SMH-06). The resultant vehicle shall be complete with an LHS installed that is able to demonstrate the HEMTT A3 unique operational modes that allows the system to transload a fully loaded flatrack from a C-130.

##### C.7. Pre-Production Truck (PPT) Build

C.7.1. PPT #1 HEMTT A3. The contractor shall build the cab & chassis for the first pre-production truck (PPT #1), to allow for assembly completion. All AoA selections conducted under paragraph C.2.2 shall be included in this prototype as well as a load handling system. The load handling system shall be installed on the vehicle by December 31, 2004. The In Process design review meetings and monthly status reports required under paragraph C.2.5 are to continue through the build of PPT #1.

##### C.8. Performance Verification Testing on Prototype Vehicles

C.8.1 Phase 0 HEMTT A3 and PPT#1 HEMTT A3. The contractor shall perform performance and reliability verification testing on the Phase 0 and PPT #1 HEMTT A3 vehicles produced under this contract. The testing shall be conducted in order to validate analytical predictions done during the initial design effort. The contractor shall develop a prototype vehicle test plan that is structured to confirm HEMTT A3 readiness for a pre-production government test. The test plan shall focus on those key tests which are necessary to shake out and resolve major design issues, confirm subsystem functionality and component compatibility, and confirm that the overall vehicle is operating safely and performs as intended. Traditional vehicle testing will be augmented with additional tests specific to the diesel-electric hybrid propulsion system and advanced load handling system capabilities of the HEMTT A3. Standard contractor test methods may be used providing there is the ability to compare HEMTT A3 performance results against the HEMTT performance requirements of ATPD 2304.

C.8.1.1. The contractor shall provide the Government a list of these recommended tests along with a tentative sequence of testing (CDRL SMH-07) thirty (30) days prior to the start of test. Following transmittal of the test plan, regular conferences between the government and contractor shall be held to further refine and coordinate the test plan. The Government may witness any or all of the testing at its option. The contractor shall document the purpose, means, and results of these tests and provide the Government with a summary, in contractor format, of the test activity following its conclusion (CDRL SMH-07).

C.8.2. Reserved.

##### C.9. Contractor-directed Shakedown RAM Testing

C.9.1. Shakedown Test Plan and Test Results. The contractor shall conduct a limited amount of shakedown testing consisting of several thousand miles on test courses to establish a level of confidence in the reliability of the HEMTT A3 prior to formal Government-directed testing. The contractor shall develop a test plan (CDRL-SMH-08) and submit it to the Government for review thirty (30) days prior to the start of test. The contractor shall use the HEMTT production verification test as a basis for its test plan development. At a minimum, the contractor's test plan shall outline the number of test miles, the test course(s) to be used, and the procedures for addressing issues arising from tests. The test courses for this test shall be chosen to demonstrate system performance on representatives of all the HEMTT Mission Profile courses and the testing shall be rigorous enough to detect early development problems. Following transmittal of the test plan, regular conferences between the government and contractor shall be held to further refine and coordinate the test plan. The Government may witness any or all of the testing at its option. The Phase 0 prototype truck w/LHS built under the base contract shall be used for shakedown RAM testing. The contractor shall provide the Government a summary of all shakedown RAM testing activity with test results (CDRL SMH-08).

C.9.2. Shakedown RAM Test Support. The contractor shall develop a list of consumables and replacement parts as a System Support Package (SSP). The contractor shall provide the list for Government review NLT sixty (60) days prior to shipment of the Phase 0 truck to the test site (SMH-09). Following transmittal of the SSP list, regular conferences between the government and contractor shall be held to further refine and tailor the list to most efficiently ensure proper support will be available during shakedown testing. The list will be finalized NLT thirty (30) days prior to the start of testing and once complete, the contractor shall procure the SSP items

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and have them available to support the testing. The contractor shall provide on-site technical representatives to support the test and perform vehicle repairs and maintenance to the extent required by the terms of its agreement with the test site. The contractor shall support the activity and assist in problem identification and root cause determination. Alternative design development and solution implementation shall be completed as part of the design cleanup tasks described in paragraph C.5.1.

C.9.3. Test Site Operator Training. The contractor shall develop and provide courses and materials in order to conduct on-site operator training. The contractor shall provide a training course outline to the Government (CDRL SMH-10). The goal is to properly train test site operators to safely operate the HEMTT A3 during the contractor-directed shakedown RAM test activity.

C.10. EMI/HAEMP Development.

C.10.1. The contractor shall perform the necessary research and design analysis required to minimize EMI/HAEMP emissions and susceptibility as defined by the HEMTT A2 EMI/HAEMP requirements (ATPD 2304). Special care should be taken to ensure electrical components and wiring harnesses have the correct shielding requirements specified. Design efforts for this activity shall be documented and a summary, in contractor format, shall be provided to the Government for informational purposes (CDRL SMH-11).

C.11. Retrofit of Phase 0 and PPT #1 vehicles following performance verification and shakedown RAM testing

C.11.1. Following performance verification testing on the Phase 0 initial prototype vehicle and the development of design and test fix changes identified during the test, the contractor shall retrofit the Phase 0 and PPT #1 vehicles to bring them to the latest configuration. The contractor shall identify a list of components to retrofit specific to each vehicle and provide a summary to the Government (CDRL SMH-12). After Government approval the contractor shall install them on the vehicles. Once the retrofit is complete, the contractor shall perform functional/QC testing of the vehicles to confirm safe operation and the vehicles are able to demonstrate the HEMTT A3 unique operational modes

C.12. Test Support Literature/Preliminary Draft Manual

C.12.1. Definitions.

a. Limited. Limited is defined as coverage to the best of the contractors ability using contractor engineering approved data that is available at least 60 days prior to the contractor's print deadline. Components for which complete data is not available shall not be covered.

b. Preliminary Draft. A Preliminary draft is defined as preliminary data, to the best of the contractor's ability using contractor engineering approved (or unapproved, but reviewed) data, subject to change at a later date when more information, feedback and funding becomes available.

c. Page-turner Electronic Technical Manual (Page-turner ETM). Page-turner ETM is defined as a CD-ROM with a printable, non-hyperlinked, partially searchable or non-searchable, non-editable electronic document without troubleshooting or diagnostic capabilities in PDF format readable by Adobe Acrobat software.

C.12.1.1. The contractor shall provide test support literature (CDRL SMH-13) in the form of preliminary draft manuals to support Government directed testing. This documentation shall include operators instructions, limited removal/installation procedures, and troubleshooting/diagnostic procedures for major components, draft PMCS procedures including services/lubrications instructions. This preliminary draft manual may be limited in coverage by schedule, vehicle design status, and vendor information availability. The HEMTT A3 documentation shall not be used as a supplement to existing HEMTT publications, but shall include the basic procedures necessary to operate and for contractor technicians to maintain the prototype HEMTT A3 during Government-directed test activity.

C.12.1.1.1. Preliminary draft HEMTT A3 operators instructions. The preliminary draft operators instructions shall include basic system descriptions, location and description of major components, controls and indicators, vehicle and system operation, operator maintenance and adjustment procedures, and necessary appendices.

C.12.1.1.2. Maintenance instructions shall include limited removal and installation procedures for major modular components and systems. The maintenance coverage developed shall be limited to new HEMTT A3 items.

C.12.1.1.3. Troubleshooting and diagnostics shall be limited to major components and sub-systems and shall not be intrusive in nature. The diagnostics shall be presented in a narrative format in which the fault code shall be explained along with limited measures to correct the fault. In the case of system-wide failures, the user shall be directed to contact the contractors engineering staff for further guidance.

C.12.1.1.4. The draft PMCS procedures including services/lubrication information shall also cover major components and systems and include the basic operator level preventative maintenance procedures and scheduled services to maintain the HEMTT A3 prototype vehicle.

C.13. Lightweight Armored Cab Study. The contractor shall provide an Analysis of Alternatives (AoA)for integration of crew protection concepts that are directly interchangeable with the base HEMTT A3 cab (CDRL SMH-14).

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C.14. Thermal Management System. The contractor shall design and develop an efficient, advanced thermal management system for the HEMTT A3 diesel electric drive system. The Thermal Management System shall be developed using advanced development techniques and engineering analyses such as solid modeling, and component and system level performance modeling and simulation. The contractor shall produce a system performance report (CDRL SMH-15) of projected thermal loads under various mission related scenarios and an assessment of the capability of the Thermal Management System to maintain an effective and safe operating temperature during sustained operation across the mission profile of all HEMTT performance requirements. The performance report shall also evaluate the projected reliability and parasitic loss associated with the components of the Thermal Management System during the worst case operational situations for thermal loading and heat rejection. A solid model print of the Thermal Management System that illustrates the component selections and integration shall also be included as part of the performance report. The report is subject to Government written approval.

SCOPE OF WORK for HEMTT A2 PLUS

C.15. Objective. The objective of this effort is to design, build and test three production representative HEMTT A2 Plus vehicles (one Load Handling System (LHS) variant, one tractor variant and one Wrecker variant) The goal for the HEMTT A2 Plus vehicles is to integrate current technology improvements into the HEMTT-A2 family of vehicles which can be incorporated into the HEMTT new production and ESP. Upon successful test completion an Engineering Change Proposal (ECP), which is subject to Government approval, shall be submitted by the contractor incorporating the updates in HEMTT ESP and current HEMTT production.

C.16. Enhancements/Improvements. The following design improvements shall be incorporated into the production representative vehicles:

- 1) Modern Power train meeting 2004 on-road EPA (with growth potential for future EPA requirements -2007)
- 2) Air Ride Suspension Front and Rear
- 3) Antilock Brake System (ABS) with traction control
- 4) Climate Control
- 5) Updated Electrical system capable of supporting diagnostics/prognostics in the future.

C.16.1. Radioactive Material. Radioactive material shall not be utilized in the equipment supplied to the Government under this contract.

C.17. Phases of The Effort. The Project consists of three Phases:

- 1) Start of Work/Engineering and Design.
- 2) Production.
- 3) Testing.

C.17.1. Phase 1: Start of work/Engineering and Design Phase. The contractor shall host a Start of Work (SOW) meeting and idea interchange at the contractors facilities within 30 days after contract award. This review is to be a free exchange of concepts and ideas for meeting the technical and schedule aspects of this SOW as well as an update of progress since contract award. Contractor shall provide SOW minutes to the Government (CDRL SMH-16). The contractor shall incorporate the enhancements listed in paragraph C.16 into the HEMTT A2 design for all HEMTT variants. Joint Design Reviews (JDR) shall be held monthly at the contractors facility or via phone conference at the Governments option. The final HEMTT A2 Plus vehicles shall meet or exceed the threshold requirements of the current HEMTT A2 vehicles as set forth in ATPD 2304. All JDRs shall have meeting minutes furnished by the contractor (CDRL SMH-16).

C.17.1.1. Powertrain Analysis of Alternatives (AoA). The contractor shall study different power train options (engine, transmission, and driveline) which shall be evaluated (advantages and disadvantages) based upon the requirements of paragraph C.17.1.1.1. The contractor shall make a recommendation on which powertrain combination best meets the overall goals and submit the study and recommendations as an AoA study. The contractor shall provide the AoA to the Government (CDRL SMH-17) for Government Review, comment and approval.

C.17.1.1.1. AoA shall address but not be limited to:

- 1) Meeting current on-Road EPA requirements - 2004 (with growth potential for future EPA requirements - 2007)
- 2) Maximized fuel economy
- 3) Forecast of power train component future availability
- 4) Power train Applicability in PLS/HET
- 5) Component cost to include new production and ESP (Both component cost and impact on HEMTT Production and ESP cost)
- 6) Projected Reliability
- 7) Special Tools requirements
- 8) Ease of replacement and accessibility (i.e. maintainability improvements (e.g. quick disconnects))
- 9) Improvement to ATPD 2304 and HEMTT ORD Requirements.

C.17.1.2. Critical Design Review. A Critical Design Review shall be held within 15 business days from Government receipt of AoA(s) at the contractors facility to finalize powertrain selection and other requirements stated in paragraph C.16, in order to determine production representative vehicle configuration for Phase 2. Meeting Minutes will be provided by the contractor (CDRL SMH-16)

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\*\*\* END OF NARRATIVE C 003 \*\*\*



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**Name of Offeror or Contractor:** OSHKOSH TRUCK CORP.

SECTION F - DELIVERIES OR PERFORMANCE

F-5 PERIOD OF PERFORMANCE

The Period of Performance for this contract effort is from the date of contract award through 30 June 2005.

\*\*\* END OF NARRATIVE F 001 \*\*\*

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SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ <u>ITEM</u> <u>MIPR</u>		OBLG STAT/ <u>JOB ORD NO</u>			INCREASE/DECREASE <u>AMOUNT</u>		CUMULATIVE <u>AMOUNT</u>
0006AA	E14DC008J6 654622E4900	AE	2 4DC008	\$	0.00	\$	9,377,697.00	\$ 9,377,697.00
0006AB	E14DC009J6 654622E4900	AE	2 4DC009	\$	0.00	\$	1,926,968.14	\$ 1,926,968.14
					NET CHANGE	\$	11,304,665.14	

<u>SERVICE NAME</u>	NET CHANGE <u>BY ACRN</u>	<u>ACCOUNTING CLASSIFICATION</u>				<u>ACCOUNTING STATION</u>	INCREASE/DECREASE <u>AMOUNT</u>
Army	AE	21	42040000041C1C03P65462231E1	S20113		W56HZV	\$ 11,304,665.14
NET CHANGE							\$ 11,304,665.14

		<u>PRIOR AMOUNT</u> <u>OF AWARD</u>	<u>INCREASE/DECREASE</u> <u>AMOUNT</u>	<u>CUMULATIVE</u> <u>OBLIG AMT</u>
NET CHANGE FOR AWARD:	\$	12,665,914.44	\$ 11,304,665.14	\$ 23,970,579.58

<u>Status</u>	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
G-1 ADDED (TACOM)	52.227-4004	RELEASE OF INFORMATION	OCT/2003

The contractor shall ensure that he complies with the requirements of Chapter 5, page 22, paragraph 5-48, of AR 360-1, The Army Public Affairs Program, dated 15 Oct 2000,\_prior to contemplated release of any procurement information. Approval of the Contracting Officer is required prior to release of any such information. AR 360-1 may be found at [http://www.usapa.army.mil/pdffiles/r360\\_1.pdf](http://www.usapa.army.mil/pdffiles/r360_1.pdf) .

[End of clause]  
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SECTION H - SPECIAL CONTRACT REQUIREMENTS

<u>Status</u>	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
H-1 ADDED	252.225-7004	REPORTING OF CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES	APR/2003
H-2 ADDED	252.225-7013	DUTY-FREE ENTRY	JAN/2004

SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Attachment 007	UPDATED PURCHASE DESCRIPTION FOR THE OFF-ROAD FAMILY OF VEHICLES & HEMTT	06-OCT-2003	158	
Attachment 008	CDRLS SMH-05 THRU SMH-17	04-MAY-2004	006	
Attachment 009	DIDS		015	
Attachment 010	GOVERNMENT FURNISHED MATERIAL (GFM) & GOVERNMENT FURNISHED PROPERTY (GFP) LIST		001	
Attachment 011	SUBCONTRACTING PLAN		005	

Government Furnished Material (GFM) & Government Furnished Property (GFP) List

Nomenclature	NSN	U/I	QTY	Condition	Unit Cost	Use
M1120 - HEMTT LHS	2320-01-471-1326	Ea.	1	Used	\$185.30K	GFM
M983 - HEMTT Tractor	2320-01-097-0247	Ea.	1	Used	\$164.87K	GFM
M984 - HEMTT Wrecker	2320-01-097-0248	Ea.	1	Used	\$228.39K	GFM
M1076 - PLS Trailer	2330-01-303-5197	Ea.	1	Used	\$47.59K	GFP

At a date TBD, the Governments intent is to identify equipment that has already been shipped to OTC for remanufacture, and use it for the A2 Plus effort.